Signature

Approved for use through 07/31/2006. OMB 0651-0032
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number

UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No
First Inventor
Title

Express Mail Label No.

40296-0048 S on Yong CHA

Magnetoresistiv Rand m Access M mo and Manufacturing Method Th r of

.s. marget 1294

See	APPLICATION ELEMENTS MPEP chapter 600 concerning utility patent applica	tion contents.	ADD	RESS TO:	Mail Stop Pater Commissioner P.O. Box 1450 Alexandria, VA	for Patents	9270 10/7
2.	Fee Transmittal Form (e.g., PTO/SB/17) Submit an original and a duplicate for fee p Applicant claims small entity status. See Specification [To preferred arrangement set forth below) Descriptive title of the Invention Cross Reference to Related Applications Statement Regarding Fed-Sponsored R& Reference to sequence listing, a table, or program listing appendix Background of the Invention Brief Summary of the Invention Brief Detailed Description of the Drawings Detailed Description Claim(s) Abstract of the Disclosure	processing) a 37 CFR 1.27. atal Pages 19 D a computer	9. 10.	Composition Nucleotide (if applicable a.	uter Program (A and/or Amino A le, all necessar omputer Read pecification Se CD-ROM or Co Paper catements verifying MPANYING APP ment Papers (cov. 3.73(b) Statemen	Acid Sequence by) able Form (CRF quence Listing of D-R (2 copies); and identity of above the companient control of the companient control of the companient control of the companient control of the cont	Submission (i) on: or //e copies
5. 🗵 6 a b 6. 🗵 7	Oath or Declaration [To Newly executed (original or copy) Copy from a prior application (37 (for continuation/divisional with Box is DELETION OF INVENTO Signed statement attached inventor(s) named in the pri see 37 CFR 1.63(d)(2) and Application Data Sheet. See 37 CFR 1. CONTINUING APPLICATION, check application following the title, or in an Application	CFR 1.63(d)) (8 completed) (8(S) deleting or application, 1.33(b).	15. 16. 17. Supply 87 CFR	□ English T □ Informati Statemen □ Prelimina □ Return R (Should It □ Certified (if foreign □ Nonpublic Applicant □ Other: T the requisite in R 1.76:	on Disclosure ont (IDS)/PTO-14- ary Amendment deceipt Postcard be specifically ite Copy of Priority of priority is claim cation Request un must attach form ransmittal of For	ment (if applicable Copies of (MPEP 503) emized) Document(s) ed) der 35 U.S.C. 122 PTO/Sb/35 or its emal Drawings (10	f IDS Citations (b)(2)(B)(i). equivalent. sheets)
For CONTI Box 5b, is	olication information: Examiner Art Unit NUATION or DIVISIONAL APPS only: The entire considered a part of the disclosure of the accor poration can only be relied upon when a portion	disclosure of the pri	n or di	ivisional applic	ation and is herel	by incorporated by	lied under reference.
		CORRESPONDE	NCE	ADDRESS			
	ner Number	26633			or Corres	pondence addres	s below
Name							
Address							
City	State			T	Zip Code	, = 1	
Country	Telephone				Fax	-	
Mama (De	internal Labour A Koman	N 17	Loui			104040 4	

This collection of information is required by 37 C.F.R. 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 C.F.R. 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions by reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date

Dhwy Jakun

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE	TRANSMITTAL
	for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 810.00

Name (Print/Type)

Signature

Johnny A. Kumar

Complete if Known				
Application Number	Unassigned			
Filing Date	Concurrently Herewith			
First Named Inventor	Seon Yong CHA	_		
Examiner Name	Unassigned			
Art Unit	Unassigned	_		
Attorney Docket No.	40296-0048	_		

METHOD OF PAYMENT (check one)	FEE CALCULATION (continued)					
☐ Credit card ☐ Money Order ☐ Other ☐ None	3. A	DDITION	AL FE	ES		
☐ Deposit Account:					· · · · · · · · · · · · · · · · · · ·	
Deposit	Large	Entity	Small	Entity		
Account 08-1641 (Docket No. 40296-0048)	Fee	Fee	Fee	Fee	Fee Description	Fee Paid
Number	Code	(\$)	Code	(\$)	_	
Deposit	1051	130	2051	65	Surcharge - late filing fee or oath Surcharge - late provisional filing fee	
Account Name Heller Ehrman White & McAuliffe LLP	1052	50	2052	25	or cover sheet	
The Commissioner is authorized to: (check all that apply)	1053	130	1053	130	Non-English specification For filing a request for ex parte	
_ ""	1812	2,520	1812	2,520	reexamination	
Charge fee(s) indicated below	1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
Charge any additional fee(s) during the pendency of this application	1805	1,840*	1805	1.840*	Requesting publication of SIR after Examiner action	_
Charge fee(s) indicated below, except for the filing fee to the above- identified deposit account.	1251	110	2251	55	Extension for reply within first month	
FEE CALCULATION	1252	420	2252	210	Extension for reply within second month	
1. BASIC FILING FEE	1253	950	2253	475	Extension for reply within third month	
Large Entity Small Entity Fee Description Fee Paid Fee Fee Fee Fee	1254	1,480	2254	740	Extension for reply within fourth month	
Code (\$) Code (\$)	1255	2,010	2255	1,005	Extension for reply within fifth month	
1001 770 2001 385 Utility filing fee 770	1401	330	2401	165	Notice of Appeal	
1002 340 2002 170 Design filing fee	1402	330	2402	165	Filing a brief in support of an appeal	
1003 530 2003 265 Plant filing fee	1403	290	2403	145	Request for oral hearing	
1004 770 2004 385 Reissue filing fee	1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1005 160 2005 80 Provisional filing fee	1452	110	2452	55	Petition to revive - unavoidable	
SUBTOTAL (1) (\$) 770	1453	1,330	2453	665	Petition to revive - unintentional	
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE	1501	1,330	2501	665	Utility issue fee (or reissue)	
Fee from Extra Claims below Fee Paid	1502	480	2502	240	Design issue fee	
Total Claims $ 13 -20^{**} = 0 x 18 = 0 $	1503	640	2503	320	Plant issue fee	
Independent Claims 2 $-3**=$ 0 x 86 = 0	1460	130	1460	130	Petitions to the Commissioner	
Multiple Dependent =	1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
Large Entity Small Entity Fee Description Fee Fee Fee Code (\$) Code (\$)	1806	180	1806	180	Submission of Information Disclosure Stmt	
Code (\$) Code (\$) 1202 18 2202 9 Claims in excess of 20	8021	40	8021	40	Recording each patent assignment per property (times number of properties)	40
1201 86 2201 43 Independent claims in excess of 3	1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1203 290 2203 145 Multiple dependent claim, if not	1810	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))	
1204 86 2204 43 **Reissue independent claims over original patent	1801	770	2801	385	Request for Continued Examination (RCE)	
1205 18 2205 9 **Reissue claims in excess of 20 and over original patent	1802	900	1802	900	Request for expedited examination of a design application	
SUBTOTAL (2) (\$)	Other fe	e (specify)				
*** which was in the side of t					(\$) 40	
SUBMITTED BY Complete (if applicable).						(\$) 10

WARDVING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Date

be Included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop ____, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Registration No.

(Attorney/Agent)

34,649

Telephone

202-912-2000

Customer No. 26633

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No.: 40296-0048

Applicant:

Seon Yong CHA

Confirmation No.:

Appl. No.:

Unassigned

Examiner: Unassigned

Filing Date: Concurrently Herewith

Art Unit: Unassigned

Title:

MAGNETORESISTIVE RANDOM ACCESS MEMORY, AND

MANUFACTURING METHOD THEREOF

TRANSMITTAL OF FORMAL DRAWINGS

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

ATTENTION: DRAWING REVIEW BRANCH

Sir:

Applicant submits herewith formal drawings, Figures 1-4n (10 sheets) for the abovecaptioned application as corrected in the Preliminary Amendment submitted herewith. The Official Draftsperson is respectfully requested to approve these drawings for entry into the application.

Heller Ehrman White & McAuliffe LLP

1666 K Street, N.W., Suite 300 Washington, D.C. 20006-4004 Telephone: (202) 912-2000 Facsimile: (202) 912-2020

Respectfully submitted,

Johnny A. Kuthar Attorney for Applicant Reg. No.: 34,649

Customer No. 26633